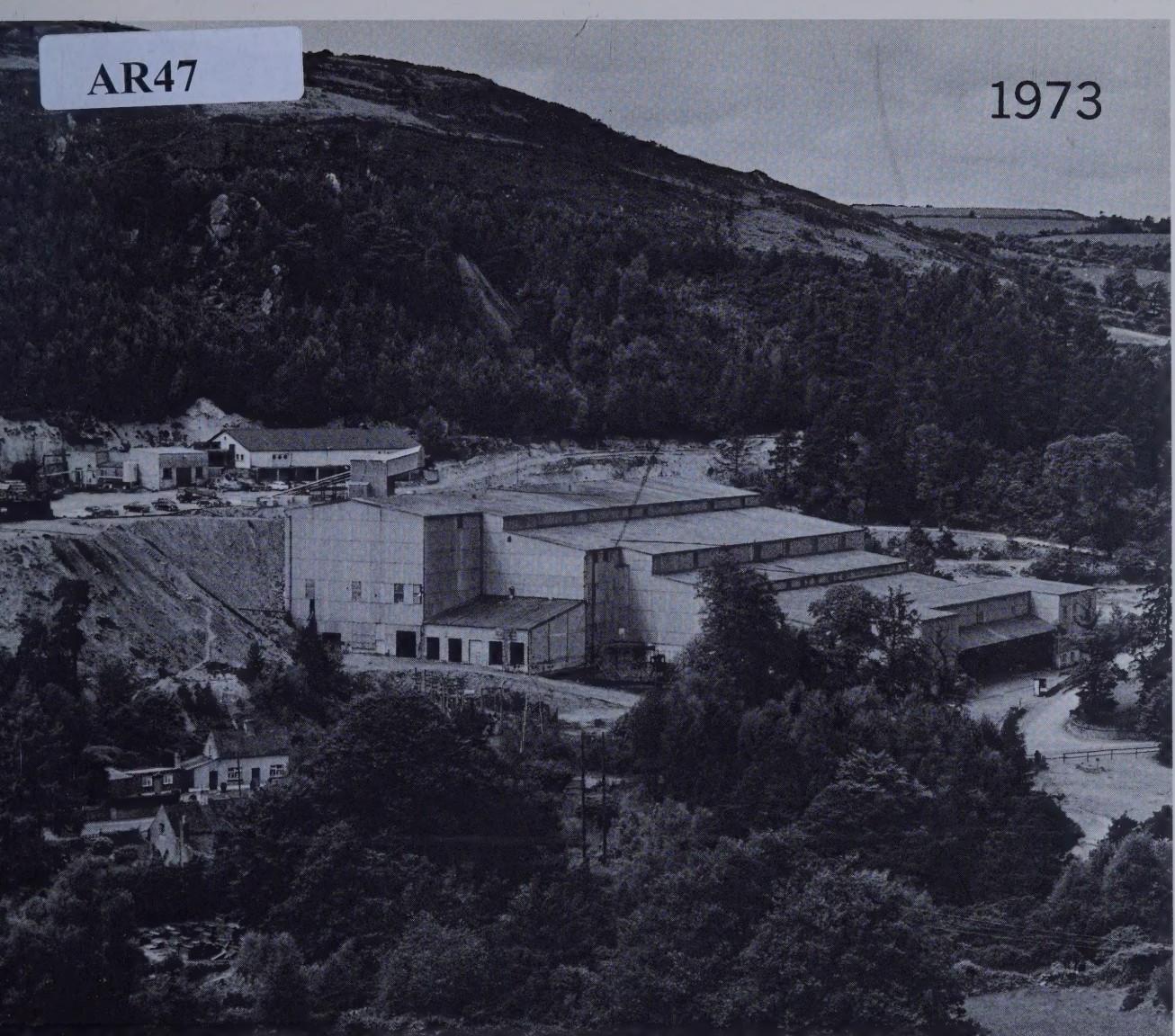


AR47

1973



FIFTH ANNUAL REPORT

AVOCA MINES
CANADA LIMITED

ANNUAL MEETING

May 28, 1974, 11:00 a.m., Room No. 3,
Main Mezzanine, Royal York Hotel, Toronto

AVOCA MINES CANADA LIMITED

OFFICERS

J. C. BYRNE
Chairman and Chief Executive Officer

J. K. B. BOOTH
President

D. R. McEWEN
Secretary-Treasurer

DIRECTORS

L. A. BEDNARZ, Toronto
Executive Engineer, Discovery Mines Limited

J. K. B. BOOTH, Toronto
Partner, Derry Michener & Booth, Consulting Geologists

J. C. BYRNE, Toronto
*President and Managing Director,
Rayrock Mines Limited and Discovery Mines Limited*

H. EARL JOUDRIE, Toronto
President and Chief Executive Officer, Ashland Oil Canada Limited

D. O. MUNGOVAN, Toronto
Queen's Counsel, Mungovan & Mungovan

S. P. OGRYZLO, Toronto
President, Patino Mines (Quebec) Limited

M. K. PICKARD, Toronto
Director, Northgate Explorations Limited

W. G. ROBINSON, Vancouver
*Vice-President and Managing Director,
Canadian Superior Explorations Limited*

M. M. SINCLAIR, Toronto
Vice-President, Guardian Growth Fund International Limited

HEAD OFFICE

Suite 1011, 2200 Yonge Street, Toronto, Canada

**TRANSFER AGENTS
AND REGISTRARS**

CROWN TRUST COMPANY, Toronto

BANKERS

ROYAL BANK OF CANADA, Bay and Temperance Branch, Toronto

AUDITORS

COOPERS & LYBRAND, Toronto

SOLICITORS

CAMPBELL, GODFREY & LEWTAS, Toronto

AVOCA MINES LIMITED

OFFICERS	W. A. SANDYS - - - - -	<i>Chairman of the Board</i>
	R. F. STEDMAN - - - - -	<i>Secretary</i>
DIRECTORS	J. C. BYRNE - - - - -	Toronto, Canada
	J. K. B. BOOTH - - - - -	Toronto, Canada
	W. R. A. KELLER - - - - -	Skankill, Ireland
	R. J. KILGOUR - - - - -	Avoca Mines, Ireland
	M. V. O'BRIEN - - - - -	Dublin, Ireland
	W. A. SANDYS - - - - -	Dublin, Ireland
MANAGEMENT	J. C. BYRNE - - - - -	<i>Managing Director</i>
	R. J. KILGOUR - - - - -	<i>General Manager</i>
MINE STAFF	D. R. CROMBIE - - - - -	<i>Assistant Manager</i>
	D. G. ARMSTRONG - - - - -	<i>Research Superintendent</i>
	J. A. CASWELL - - - - -	<i>Purchasing Agent</i>
	C. ARTHUR - - - - -	<i>Mill Superintendent</i>
	C. H. MACDONALD - - - - -	<i>Mechanical Engineer</i>
	B. McKEON - - - - -	<i>Chief Engineer</i>
	K. A. NENDSA - - - - -	<i>Construction Superintendent</i>
	J. W. PLATT - - - - -	<i>Chief Geologist</i>
	S. P. SCRIVEN - - - - -	<i>Chief Accountant</i>
	T. SHAW - - - - -	<i>Personnel Officer</i>
	D. P. SPONTON - - - - -	<i>Electrical-Mechanical Superintendent</i>
	R. F. STEDMAN - - - - -	<i>Office Manager</i>
	A. M. THOMAS - - - - -	<i>Mine Superintendent</i>
CONSULTING METALLURGIST	F. B. BRIEN - - - - -	Seattle, Washington
SOLICITORS	WHITNEY, MOORE & KELLER - - - - -	46 Kildare Street Dublin 2, Ireland
AUDITORS	GRiffin, LYNCH & Co. - - - - -	18 St. Stephen's Green, N. Dublin 2, Ireland
BANKERS	THE BANK OF IRELAND - - - - -	Arklow, County Wicklow, Ireland
	CHASE AND BANK OF IRELAND (INTERNATIONAL) LTD. - - - - -	18 St. Stephen's Green, N. Dublin 2, Ireland
MINE OFFICE	AVOCA, ARKLOW, COUNTY WICKLOW	Ireland

AVOCA MINES CANADA LIMITED

Directors' Report

TO THE SHAREHOLDERS:

As a result of higher earnings in 1973 your Company's Irish operation was able to finance the depth development program conducted during the year and initiate mill expansion while, at the same time, improve its overall financial picture. Net profit of \$1,276,724, equivalent to 21.5 cents per share, compares with a net loss of \$143,160 in 1972; cash flow totalled \$3,200,219. The improvement is attributable primarily to strong copper prices, the average LME wirebar settlement being 81 cents per lb. in 1973 and only 49 cents in 1972.

Copper production of 15.3 million pounds contained in concentrate declined by 12 per cent while mill throughput remained unchanged, the average daily rate being 2,926 tons. Unchanged also was the output of pyrite concentrate at 73,523 short tons. Importantly, a significant increase in price for the pyrite sold under contract was recently posted.

Satisfactory progress is being recorded for both depth mine development and mill expansion to 4,000 tons per day, which increase is scheduled to be completed in the fourth quarter of this year. Coincident with this work is the extension to and modernization of the existing underground conveyor system and installation of larger crushing facilities.

Exploration of a portion of the Avoca mine lease and several adjacent prospecting permit areas is being undertaken by a wholly-owned subsidiary of Esso Eastern, Inc., under a working option arrangement. Thus far two major airborne conductor systems have been disclosed which are regarded as attractive drill targets.

Outlook for 1974 indicates a possible slight reduction in copper output due to production disruption during installation of new conveyor equipment from the bottom mine level to surface. Earnings projections are made difficult by volatile copper prices in the face of rising operating costs. In addition, disclosure is awaited of the amending tax legislation to which all mines in Eire will be subject commencing April, 1974. While previous incentives will be replaced by less attractive legislation, preliminary information suggests that the new tax bill will be reasonable. Consideration in the form of tax relief will apparently be accorded marginal mining operations to ensure their continuing viability.

Debt obligations will be further reduced this year with the retirement in July of the final Preference Share instalment, and possibly partial redemption of the outstanding debentures, the principal amount of which total \$1,750,000.

On behalf of the Board of Directors

J. C. BYRNE
Chairman and Chief Executive Officer

J. K. B. BOOTH
President

Toronto, Canada
April 11, 1974

Report of Operations

We submit herewith the report of operations of Avoca Mines Limited for the year ended December 31, 1973.

PRODUCTION

The following operating summary shows the production statistics for the years 1973 and 1972, and for the cumulative 38-month period from commencement of milling in November, 1970.

	<u>1973</u>	<u>1972</u>	Total November 1970 through 1973
Dry tons milled	1,068,100	1,066,450	3,108,800
Average tons per calendar day	2,926	2,914	2,724
Mill head grade — % Copper	0.86	0.99	0.90
Copper recovery — per cent	85.2	85.3	86.3
Copper concentrate, Dry short tons	41,280	45,310	119,783
Copper concentrate grade — % Copper	18.7	19.0	19.4
Pyrite Concentrate, Dry short tons	73,523	72,812	177,304
Pyrite concentrate grade — % Sulphur	47.9	47.8	47.4

The following tabulation is presented to indicate the source of ore mined and delivered to the Avoca mill in 1973.

Ore Source

	Tons	% Copper	Percentage Contribution
South Lode	564,210	0.73	53
Pond Lode — Underground	181,450	0.92	17
Cronebane Open Pit	153,550	1.55	14
Pond Lode — Open Pit	70,740	0.52	7
Development and Cobbings	98,080	0.64	9
	1,068,030	0.86	100

Mill throughput, while the same as in 1972, was below expectations. Periodic shortfalls in the underground feed were the result of the depth development program placing heavy demands on available mine equipment.

Overall copper grade was lower due primarily to serious dilution in the Pond Lode, but recent modifications in the mining approach have alleviated the problem somewhat.

Open pit mining of the near surface expression of the Pond Lode commenced in August. Together with the Cronebane ore the two open pits provided one-fifth of the mill throughput in 1973.

Copper recoveries of 85 per cent were generally satisfactory considering the metallurgical complexity of the Cronebane secondary ore, and the poor results from the treatment of some oxidized material extracted from the early life of the Pond Lode open pit.

Revenue from pyrite production, sold to a local government owned fertilizer manufacturer, has been enhanced by 75 pence per ton (about \$1.75 Cdn.) effective March, 1974. The increase reflects improved sulphur prices on world markets.

Two types of copper concentrates are being produced since the beginning of this year — one from the treatment of South and Pond Lode ore, and the other from milling of the complex Cronebane ore. While the two concentrate types had been blended during a two year period their separation was dictated by the increasing zinc content of the Cronebane secondary ore. Economic investigations demonstrated that it was advantageous to market a good grade copper concentrate and a bulk copper-zinc concentrate. A contract for sale of the bulk concentrate was finalized near year end.

DEVELOPMENT AND DRILLING SUMMARY — 1973

(a) **Development**

	<u>Footage</u>
Stope Development	
— Drifts and Crosscuts	4,500
— Raises	737
Deferred Development	
— Conveyor Tunnels	2,966
— Main Decline Extension	1,636
TOTAL	9,839

(b) **Drilling**

	<u>Footage</u>
Surface Diamond Drilling	2,433
Underground Diamond Drilling	11,619
	14,052

Extension of the main decline, begun in October, 1972, was completed to the 2000 level last April. Excavation of the conveyor galleries, consisting of two legs, was recently concluded in February, and excavation of the crushing chambers, surge bin of 1,500 ton capacity, and their respective accesses are nearing completion.

Underground drill investigation was directed to better defining the South Lode between the 1670 and 2000 levels, and also to outlining stope walls in the Pond Lode above the 1670 level.

Surface drilling was concentrated in locating and defining a near surface remnant of the Pond Lode, and cross sectioning for metallurgical purposes, the primary sulphide ore underlying the Cronebane secondary material which has been providing mill feed since late 1971.

ORE RESERVES

Summary of proven and probable ore reserves as at January 1, 1974 is presented as follows:

Source	Mining <u>Block</u>	Category	Tons	% Copper
South Lode	1300-1670	Proven	455,000	0.79
	1670-2000	Probable	2,474,000	0.89
Pond Lode	1040-1670	Proven	622,000	1.19
	1040-1670	Probable	1,176,000	1.19
Cronebane	Open Pit	Probable	864,000	0.57
	Open Pit	Proven	570,000	1.06
TOTAL PROVEN AND PROBABLE			6,161,000	0.94

Tonnages, expressed as short tons, and grades reported above are undiluted. Underground experience has demonstrated that dilution in the South Lode approximates 20 per cent of 0.5% copper grade, and that for the Pond Lode 20 per cent of zero grade.

Reported reserves are recoverable except for the tonnage categorized as South Lode Probable, for which an 80 per cent mining recovery is anticipated.

EXPANSION

Mill expansion to 4,000 tons per day is in progress and its completion during the latter part of 1974 is scheduled to coincide with commencement of mining from the South Lode orebody developed between the 1670 and 2000 levels. Increased underground production will be made possible by the installation of a larger crusher together with expansion and modernization of the existing conveyor system. Changeover to new conveying equipment is scheduled for July and August, during which time copper output will be derived from the two open pits. A used primary crusher is currently being installed on surface to crush ore from the Pond Lode pit and eventually primary ore from Cronebane.

EXPLORATION

During the past year Avoca concluded an exploration agreement with Vale Exploration Limited, a wholly-owned Irish subsidiary of Esso Eastern Inc. Under the terms of the agreement Esso is committed to spend \$150,000 on a program of airborne geophysics, geological mapping, and ground follow-up of a portion of the Avoca mining lease and contiguous prospecting permit areas. Avoca has to date been granted seven of nine prospecting licenses for which the Company had applied. Should Vale Exploration spend \$500,000 on exploration it would then earn a 60 per cent interest in any mineral deposit discovered. If Avoca Mines elects non-participation in further expenditures Avoca's interest could be reduced to 20 per cent or, at Avoca's option, to a 5 per cent net smelter interest.

The airborne geophysics is nearing completion and several conductors have been indicated. Two anomalous responses have been further defined by ground investigations and are regarded as attractive drilling targets.

ACKNOWLEDGEMENTS

The Directors of Avoca gratefully acknowledge the hard work and dedication of the General Manager, Mr. R. J. Kilgour, his loyal staff and employees upon whom the profitability of the low-grade operation is so dependent.

J. C. BYRNE

Managing Director

April 5, 1974

AVOCA MINES CANADA LIMITED

Consolidated Statement of Earnings

For the year ended December 31, 1973

	1973 \$	1972 \$
Sales of concentrates	12,555,740	9,004,462
Less: Smelter charges and freight	2,986,890	2,642,326
	<u>9,568,850</u>	<u>6,362,136</u>
Mine operating expenses including mining, current development and mine overhead	6,124,935	4,952,841
Mine operating profit before depreciation and amortization of deferred expenditure	<u>3,443,915</u>	<u>1,409,295</u>
 Expenses		
Head office	22,316	16,142
Interest on long-term debt	52,500	52,500
Other interest	170,580	124,698
Depreciation	972,793	676,083
Amortization of deferred development expenditure	898,445	643,214
Amortization of deferred financing expense	50,557	39,818
	<u>2,167,191</u>	<u>1,552,455</u>
Net earnings (loss) for the year	<u>1,276,724</u>	<u>(143,160)</u>
Net earnings (loss) per share	<u>\$0.215</u>	<u>(\$0.024)</u>

Consolidated Statement of Retained Earnings

For the year ended December 31, 1973

	1973 \$	1972 \$
Deficit — Beginning of year	834,150	424,442
Net earnings (loss) for the year	1,276,724	(143,160)
	<u>442,574</u>	<u>(567,602)</u>
Dividends paid on preference shares of subsidiary company	125,987	266,548
Balance — End of year (note 13)	<u>316,587</u>	<u>(834,150)</u>

*Consolidated Balance Sheet***ASSETS**

	1973 \$	1972 \$
Current Assets		
Cash	10,459	21,921
Accounts receivable	180,861	148,000
Smelter settlements receivable	1,042,897	417,464
Concentrates on hand (note 2)	959,449	528,389
	<u>2,193,666</u>	<u>1,115,774</u>

	Cost \$	Accumulated depreciation (note 3) \$		
Mine Assets				
Land and buildings	573,222	195,380	377,842	405,227
Structures and roads	689,334	236,133	453,201	532,633
Machinery and equipment	3,710,112	1,431,270	2,278,842	2,694,439
Construction in progress	1,190,025	—	1,190,025	48,924
	<u>6,162,693</u>	<u>1,862,783</u>	<u>4,299,910</u>	<u>3,681,223</u>

Other Assets

Mine stores, at cost	523,160	446,874
Deferred development (note 4)	4,155,238	4,336,229
Deferred financing expenses (note 5)	361,666	230,598
Incorporation expense	—	1,700

Signed on behalf of the Board,

J. C. BYRNE, Director.

S. P. OGRYZLO, Director.

11,533,640	9,812,398
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ANADA LIMITED

as at December 31, 1973

LIABILITIES

	1973 \$	1972 \$
Current Liabilities		
Bank indebtedness, secured (note 6)	869,420	903,621
Accounts payable and accrued expenses	1,497,854	1,002,599
Due to parent company	11,305	87,973
Current portion of long-term debt	136,950	—
	<u>2,515,529</u>	<u>1,994,193</u>
Long-Term Debt		
8½% unsecured income debentures, due December 31, 1975 (note 7)	1,000,000	1,000,000
7% unsecured subordinated debentures, due December 31, 1975 (note 8)	750,000	750,000
Due to the Receiver for St. Patrick's Copper Mines Limited (note 9)	1,723,650	1,741,500
Amount owing on equipment (note 10)	1,092,037	—
	<u>4,565,687</u>	<u>3,491,500</u>
Less: Current portion	136,950	—
	<u>4,428,737</u>	<u>3,491,500</u>
9¾% cumulative redeemable preference shares of subsidiary company (note 11)	425,272	1,313,340
	<u>7,369,538</u>	<u>6,799,033</u>

SHAREHOLDERS' EQUITY

Capital stock (note 12)		
Authorized —		
8,000,000 shares of \$0.50 par value each		
Issued —		
5,925,000 shares	2,962,500	2,962,500
Contributed surplus	885,015	885,015
Retained earnings (deficit) (note 13)	316,587	(834,150)
	<u>4,164,102</u>	<u>3,013,365</u>
	<u>11,533,640</u>	<u>9,812,398</u>

AVOCA MINES CANADA LIMITED

Consolidated Statement of Source and Use of Funds

For the year ended December 31, 1973

	1973 \$	1972 \$
Source of funds		
Current operations		
Net earnings (loss) for the year	1,276,724	(143,160)
Items not affecting working capital —		
Depreciation	972,793	676,083
Amortization of deferred development expenditure	898,445	643,214
Amortization of deferred financing expense	50,557	39,818
Other	1,700	—
Long-term financing of equipment purchases	3,200,219	1,215,955
Issue of capital stock	1,092,037	—
	<u>4,292,256</u>	<u>1,230,955</u>
Use of funds		
Additions to mine buildings and equipment	1,591,480	418,584
Redemption of preference shares of subsidiary company	888,068	187,620
Dividends paid on preference shares of subsidiary company	125,987	266,548
Increase (decrease) in mine stores	76,286	(56,602)
Development expenditures	717,454	—
Financing expense incurred	181,625	—
Reduction of long-term debt	154,800	—
	<u>3,735,700</u>	<u>816,150</u>
Increase in working capital	<u>556,556</u>	<u>414,805</u>
Working capital deficiency — Beginning of year	<u>878,419</u>	<u>1,293,224</u>
Working capital deficiency — End of year	<u>321,863</u>	<u>878,419</u>

Auditors' Report to the Shareholders

We have examined the consolidated balance sheet of Avoca Mines Canada Limited and its subsidiary as at December 31, 1973 and the consolidated statements of earnings, retained earnings and source and use of funds for the year then ended. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion these consolidated financial statements present fairly the financial position of the companies as at December 31, 1973 and the results of their operations and the source and use of their funds for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Toronto, Ontario,
March 29, 1974.

COOPERS & LYBRAND,
Chartered Accountants.

AVOCA MINES CANADA LIMITED

Notes to Consolidated Financial Statements

For the year ended December 31, 1973

1. Principles of consolidation

Included in the financial statements are the accounts of the wholly-owned Irish subsidiary, Avoca Mines Limited (Avoca Ireland). Current assets and current liabilities of Avoca Ireland at December 31, 1973 have been converted to Canadian currency at the rate of exchange prevailing at that date. Other assets and liabilities have been converted at historical rates.

2. Concentrates on hand

	1973 \$	1972 \$
Copper concentrates at estimated net realizable value	783,690	424,197
Other concentrates at estimated net realizable value	175,759	104,192
	<u>959,449</u>	<u>528,389</u>

In computing the estimated net realizable value of copper concentrates on hand at December 31, 1973 a price of \$1.01 (1972, \$0.46½) per pound of copper has been used.

3. Depreciation

Depreciation is provided on fixed assets on a basis which will write off their cost within their expected lives. Rates in use are as follows:

Mobile equipment — 20% per annum on cost
Other assets — 12½ % per annum on cost

4. Deferred development

	1973 \$	1972 \$
Expenditure to end of previous year	5,312,637	5,312,637
Expenditure during the year	717,454	—
Expenditure to end of year	6,030,091	5,312,637
Less: Amortization	1,874,853	976,408
	<u>4,155,238</u>	<u>4,336,229</u>

Amortization of deferred development is calculated on a unit of production basis, with reference to reported ore reserves.

5. Deferred financing expense

	1973 \$	1972 \$
Interest portion of amount owing to the Receiver for St. Patrick's Copper Mines Limited — amortized on a unit of production basis	193,500	193,500
Discount on 7% subordinated unsecured debentures — amortized over their 5½ year term	125,025	125,025
Interest portion of equipment purchase contract — amortized over 5 year period of financing	181,625	—
Less: Amortization	500,150	318,525
	<u>138,484</u>	<u>87,927</u>
	<u>361,666</u>	<u>230,598</u>

6. Bank indebtedness

Bank indebtedness is secured by deposit of title deeds and a debenture charge on all of the assets of Avoca Ireland.

7. 8½% Unsecured income debentures

These income debentures mature on December 31, 1975. Interest accrues from their date of issue and is payable on April 30 in each year only out of operating profits as defined. Interest accrued to December 31, 1973 and unpaid is \$367,500, but because there have not yet been sufficient operating profits, this

amount has not been recorded in the accounts. Income debentures must be redeemed prior to maturity if operating profits exceed certain limits. Avoca Mines Canada Limited (Avoca Canada) may not pay dividends or make payments of principal on its 7% subordinated unsecured debentures until the income debentures are redeemed.

8. 7% Unsecured subordinated debentures

\$750,000 principal amount of these debentures, maturing on December 31, 1975 and bearing interest at 7% per annum, payable half yearly, were issued by Avoca Canada for cash in 1970 at a discount of \$125,025. Avoca Canada may not pay dividends until these debentures are redeemed in full.

9. Due to the Receiver for St. Patrick's Copper Mines Limited

The amount due to the Receiver for St. Patrick's Copper Mines Limited is payable by Avoca Ireland without interest in annual instalments equal to 15% of the profits of Avoca Ireland as defined by the agreement with the Receiver.

10. Amount owing on equipment

In January, 1973 Avoca Ireland entered into an agreement with a French company for the purchase of capital equipment for use in its depth development programme. Under the terms of this agreement, 85% of the capital cost of this equipment, with interest thereon, is repayable by ten equal semi-annual instalments commencing in February, 1975.

Interest payable under this agreement has been deferred and will be amortized over the period of the financing commencing in February, 1974.

The obligations of the subsidiary under this agreement have been guaranteed by an Irish Government Agency, which holds a charge on the assets of Avoca Ireland.

11. 93 1/4 % Cumulative, redeemable preference shares of subsidiary company

These shares were issued in 1970 by Avoca Ireland to its bankers for cash.

In accordance with the terms of issue, dividends are payable quarterly commencing on March 31, 1971. Redemption of the preference shares is due in half-yearly instalments from December 31, 1971 to June 30, 1974 subject to compliance with the requirements of the Companies Act, 1963 (Ireland). The final redemption of preference shares is due on June 30, 1974.

The dividends paid in respect of the period November 18, 1970 to December 31, 1973 have been declared out of net earnings before providing for amortization of preproduction and development expenses.

The charge of \$125,987 in the accounts is in respect of dividends for fifteen months ended December 31, 1973.

12. Capital stock

(a) Articles of Amendment were filed on June 22, 1973 increasing the authorized capital of the company from 6,000,000 shares of \$0.50 par value each to 8,000,000 shares of \$0.50 par value each.

(b) Shares have been issued for the following consideration:

	\$
4,400,000 shares for cash	2,200,000
1,500,000 shares for common shares of Avoca Ireland at valuation placed thereon by the Directors	750,000
25,000 shares for services rendered by parent company at valuation placed thereon by the Directors	12,500
<u>5,925,000</u> shares (total)	<u>2,962,500</u>

13. Retained earnings

Consolidated retained earnings includes a credit of \$1,075,688 which Avoca Ireland carries in its accounts as "capital redemption reserve fund". This amount was segregated in the subsidiary's accounts in accordance with a statutory requirement upon the redemption of preferred shares (as outlined in note 11) and is non-distributable to the parent company by way of ordinary dividend but may be distributed by way of formal capital redemption procedures.

14. Remuneration of directors and senior officers

The aggregate direct remuneration paid to directors and senior officers by the company and its subsidiary in 1973 was \$44,272.

15. Pension plan

The subsidiary participates in a pension plan administered by Discovery Mines Limited. During 1973, the plan was brought up to date to provide for existing circumstances and the subsidiary is paying each year for five years commencing in 1973 an amount of \$10,200 to provide for the increased benefits in accordance with actuarial calculations.

16. Taxation

No liability for income tax or corporation profits tax arises on the operating profit of the subsidiary for the year, due to the provisions of the Finance Act, 1967 (Ireland) which provide for a 20 year tax-exempt period for mines. However, the Irish Government by announcements on September 25 and October 19, 1973, indicated its intention to withdraw this exemption from April, 1974. Details of the proposed amending legislation have not yet been made available.

